

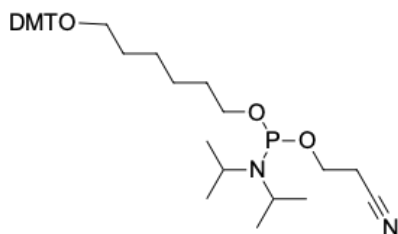
C6 Spacer phosphoramidite

<http://cn.lumiprobe.com/p/phosphoramidite-spacer-c6>

C6 spacer phosphoramidite serves as a crucial tool in nucleic acid chemistry, enabling researchers to design more effective oligonucleotides by incorporating hydrophobic spacers that enhance performance in various biochemical applications. Its ability to minimize unwanted interactions while providing structural flexibility makes it an invaluable reagent in modern molecular biology techniques. Multiple spacers can be added to achieve precise control over the length of the spacer arms, which is essential in studies involving hairpin loops and duplex formations.

The C6 spacer is hydrophobic, making it suitable for applications where water solubility is not critical. It effectively distances fluorescent dyes or other modifications from the oligonucleotide sequence, reducing quenching effects. For example, G-rich sequences can quench fluorescein; adding a spacer helps mitigate this issue.

This spacer can be utilized in various contexts, including PCR amplification and hybridization assays. It allows for flexibility in the design of probes and primers, which can be crucial for specific applications like Scorpion Primers and SMART detection assays.



外观 无色油状物

分子量 620.77

分子式 $C_{36}H_{49}N_2O_5P$

溶解度 DCM、乙腈、DMF、DMSO。对溶剂中的水分敏感。

质量控制 NMR 1H , ^{31}P , HPLC-MS (95%), 功能测试

储存条件 收到后在 $-20^\circ C$ 黑暗条件下可保存 12 个月。运输: 室温下最多可保存 3 周。干燥。

法律声明 本产品仅供研究目的提供和销售。本产品并未经过食品、药品、医疗器械、化妆品等领域的安全性和效力测试, 且未经明示或暗示授权用于其他任何用途, 包括但不限于体外诊断、人类或动物用途, 以及商业用途。

稀释剂 无水乙腈

偶联条件 与正常核碱基相同的标准条件。

切割条件 在浓氢氧化铵中, $60^\circ C$ 下反应 5 小时 (或快速脱除酰胺基则需 1 小时)。AMA 混合物 (浓氨水/40% 甲胺 1:1) 在 $65^\circ C$ 下反应 15 分钟。